

Roggenbier

- Gravity **12.9 BLG**
- ABV ---
- IBU **24**
- SRM **12.9**
- Style **Roggenbier**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **44 C**, Time **15 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **48C**
- Add grains
- Keep mash **15 min** at **44C**
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **15.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Rye Malt	1.6 kg (50%)	85 %	8
Grain	Weyermann - Pilsner Malt	0.8 kg (25%)	81 %	5
Grain	Weyermann - Munich II	0.666 kg (20.8%)	78 %	22
Grain	Weyermann - Caramunich II	0.133 kg (4.2%)	76 %	236

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Spalt Select	20 g	60 min	3.4 %
Boil	Hallertau Spalt Select	25 g	30 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew WB-06	Wheat	Dry	6 g	Safbrew